# **OSP Broadband Category 5e**

BBDe, BBDNe and BBDGe

#### PRODUCT DESCRIPTION

BBD Category 5e Outside Plant (OSP) cables are designed to provide extension of the LAN beyond the premises. The core is filled with PFM™ thixotropic filling compound to prevent water ingress. PFM gel will not drip even in cell tower applications at elevated temperatures. A variety of constructions are available to suit multiple environmental needs. Shielded designs feature dry water block between the shield and the core jacket to prevent water ingress. Shielded designs are suitable for direct buried applications; the unshielded design requires a duct or conduit.

### **APPLICATIONS**

- 10BASE-T through 10GBASE-T Ethernet
- IEEE 802.3af, Power over Ethernet (PoE)
- IEEE 802.3at Type 1 and 2, PoE+
- ATM and token ring
- WiMAX cell towers
- BBDNe: Lashed aerial, underground conduit or low-risk direct burial
- BBDGe: Direct burial where additional mechanical protection is required

## **FEATURES**

- Transmission performance characterized to 350 MHz
- BBDe: Unshielded
- BBDNe: Aluminum tape shield
- BBDGe: Copper-clad steel armor
- and inner jacket
- PFM gel-filled core construction
   Prevents intrusion of moisture
- OSP-grade black polyethylene jacket
- ColorTip™ circuit identification system

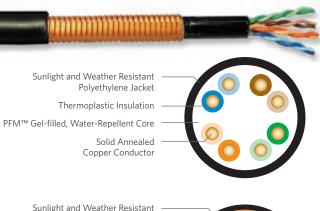
#### BENEFITS

- OSP rated cable connections for work area and backbone LAN
- Small, robust design for unshielded applications
- Protection against EMI/RFI
- Protection against EMI/RFI and provides rodent resistance
- Dry block between shield/armor
   Prevents water ingress between shield in inner cable preventing damage to equipment
  - and easily wipes clean during
  - · Outside plant rated cable for years of reliable performance
  - Easily identifiable conductor mates even in low-light environments



## **TECHNICAL GUIDELINE**

Special connectivity is required for these cable designs. Refer to the "Resources" section on our site for the Technical Guideline, "OSP Broadband Installation Guidelines," for more information.



Sunlight and Weather Resistant Polyethylene Outer Jacket Aluminum Tape Shield (BBDNe) or Copper-clad Steel Armor (BBDGe) Polyethylene Inner Jacket PFM Gel-filled, Water-Repellent Core Solid Annealed Copper Conductor Thermoplastic Insulation

SPECIFICATIONS			
Pair Count	4		
Conductor	Solid annealed copper		
AWG (mm)	24 (0.51)		
Filling Compound	PFM <sup>™</sup> thixotropic gel		
Insulation	Solid polyolefin		
Shield/Armor	BBDe: Unshielded BBDNe: Electrically continuous 0.008 in (0.20 mm) polymer coated smooth aluminum tape, applied with an overlap BBDGe: Electrically continuous 0.005 in (0.13 mm) corrugated copper-clad steel armor, applied with an overlap		
Dry Water Block	BBDNe: SAP powder BBDGe: SAP yarn		
Jacket	Black, sunlight and weather resistant polyethylene		
Characteristic Impedance Ohms	100 ± 15		
Nominal Velocity of Propagation %	65		
Performance Compliance	ANSI/TIA-568-C.2 ANSI/ICEA S-107-704-2006 RoHS-compliant REACH-compliant		

## PART NUMBERS AND PHYSICAL CHARACTERISTICS

			Nominal Diameter	Approx. Weight	
Part Number	Product Code	Shield/Armor	in (mm)	lbs/kft (kg/km)	Package
04-001-58	BBDe	None	0.26 (6.6)	30 (45)	1,000' Plywood reel
04-002-58	BBDe	None	0.26 (6.6)	30 (45)	2,500' Plywood reel
04-003-58	BBDe	None	0.26 (6.6)	30 (45)	5,000' Plywood reel
04-601-58	BBDe	None	0.26 (6.6)	30 (45)	Cut to length
04-001-54	BBDNe	Coated aluminum tape	0.36 (9.1)	55 (82)	1,000' Plywood reel
04-002-54	BBDNe	Coated aluminum tape	0.36 (9.1)	55 (82)	2,500' Plywood reel
04-003-54	BBDNe	Coated aluminum tape	0.36 (9.1)	55 (82)	5,000' Plywood reel
04-601-54	BBDNe	Coated aluminum tape	0.36 (9.1)	55 (82)	Cut to length
04-001-55	BBDGe	Copper-clad steel	0.36 (9.1)	64 (95)	1,000' Plywood reel
04-002-55	BBDGe	Copper-clad steel	0.36 (9.1)	64 (95)	2,500' Plywood reel
04-003-55	BBDGe	Copper-clad steel	0.36 (9.1)	64 (95)	5,000' Plywood reel
04-601-55	BBDGe	Copper-clad steel	0.36 (9.1)	64 (95)	Cut to length

